

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: September 17, 2003, 16:20:15 ; Search time 285.676 Seconds

(without alignment) 13909.353 Million cell updates/sec

Title: US-10-026-106-9

Perfect score: 1472

Sequence: 1 aagggcatggcgggccga.....acatccaccgatctgacg 1472

Scoring table:

IDENTITY NUC
Gapop 10.0, Gapext 1.0

Searched: 2552756 seqs, 1349719017 residues

Total number of hits satisfying chosen parameters: 5105512

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1378	86.8	1563	24	ABQ73078 Human zcytor19 enc
2	1378	86.8	1563	25	ABQ50487 Human zcytor19 rec
3	1359	85.5	1476	24	ABQ73068 Human zcytor19 enc
4	1359	85.5	1476	25	ABQ50485 Human zcytor19 rec
5	861.8	58.5	1473	24	ABQ73069 Human zcytor19 deg
6	852.6	57.9	1560	24	ABQ73085 Human zcytor19 deg
7	612.8	41.6	1422	24	ABQ73080 Human zcytor19 and Pc4 f
8	611.6	41.5	1922	24	ABQ73089 MBP and zcytor19 f

9	510	34.6	673	24	ABQ73079
10	510	34.6	674	25	ABQ50488
11	510	34.6	704	24	ABQ35324
12	363.2	24.7	633	24	ABQ73086
13	347.4	23.6	374	22	AAFE4460
14	163.8	11.1	392	22	AAFE5622
15	162.2	11.0	382	22	AAFE5522
16	128	8.7	634	22	AAFE5572
17	53.4	3.6	347	22	AAKS5707
18	48.8	3.3	470	22	AAK66622
19	43.2	2.9	3780	22	AAK13823
20	43.2	2.9	4174	22	AAK13821
21	42.2	2.9	971	21	AAK58863
22	41.4	2.8	10732	21	AAK10594
23	41	2.8	693	22	AAQ64415
24	41	2.8	693	22	AAK83736
25	41	2.8	693	24	AAQ45960
26	41	2.8	693	25	AAQ48050
27	40	2.7	1042	22	AAQ08407
28	39.6	2.7	690	24	AAQ45990
29	39.4	2.7	24757	22	AAK27687
30	39.4	2.7	24757	22	AAK33481
31	39.2	2.7	1677	18	AAV06059
32	39.2	2.7	1954	20	AAK28368
33	39.2	2.7	3317	18	AAV06060
34	39.2	2.7	3318	20	AAK28369
35	39.2	2.7	3389	20	AAK28367
36	39.2	2.7	3395	19	AAV40547
37	39.2	2.7	4739	23	AAK4367
38	39.2	2.7	5107	22	AAH48489
39	39.2	2.7	5128	25	ABK78274
40	39.2	2.7	5203	23	AAK43366
41	39.2	2.7	5344	22	AAH44375
42	39.2	2.7	15202	20	AAK28371
43	39.2	2.7	16946	22	ABK02324
44	39	2.6	1458	23	AAK58625
45	39	2.6	2300	22	AAK23602

ALIGNMENTS

RESULT 1

ABQ73078 ID: ABQ73078 standard; cDNA, 1563 bp.

AC ABQ73078; (first entry)

DE Human zcytor19 encoding cDNA SEQ ID NO:18.

KW Human, zcytor19; cytokine receptor; immunosuppressive; cytostatic;
KW antineoplastic; antiarthritic; neuroprotective; antiinflammatory;
KW antidiabetic; nephrotoxic; dermatological; anti-HIV; haemostatic;
KW vaccine; immune system; T-cell specific leukemia; lymphoma; lupus;
KW autoimmune disease; rheumatoid arthritis; multiple sclerosis; HIV;
KW diabetes mellitus; inflammatory bowel disease; Crohn's disease; asthma;
KW immunologic renal disease; glomerulonephritis; vasculitis; polyarthritis;
KW megaloproliferative disease; chronic lymphocytic leukemia; bronchitis;
KW secondary glomerulonephritis; scleroderma; amyloidosis; multiple myeloma;
KW haemolytic uraemic syndrome; renal neoplasm; urological neoplasm;
KW emphysema; chronic airway disease; chromosome 1; chromosome 1p36.11;
KW gene; ss.

XX Homo sapiens.

OS Homo sapiens.

XX Homo sapiens.

XX Homo sapiens.

XX Homo sapiens.

XX Homo sapiens.

XX Homo sapiens.

XX Homo sapiens.

XX Homo sapiens.

XX Homo sapiens.

FT mac_peptide 61..1560
 FT /*tag= C
 FT /product= "mature zcytor19"
 PN MO200244209-A2.
 XX 06-JUN-2002.
 PD
 XX 28-NOV-2001; 2001WO-US44808.
 XX 28-NOV-2001; 2000US-253561P.
 XX 07-FEB-2001; 2001US-267211P.
 XX (ZYMO) ZYMOGENETICS INC.
 PA Presnell SR, Xu W, Novak JE, Whitmore TE, Grant FT;
 PI WPI; 2002-527700/56.
 DR P-PDB; ABB81643.
 XX
 XX Novel Zcytor19 polypeptides and polynucleotides useful for stimulating
 PT immune responses in animals for producing antibodies, and for treating
 PT autoimmune diseases, leukemia and asthma -
 PS
 XX Claim 2; Page 174-177; 200pp; English.
 CC The present invention describes an isolated human zcytor19 protein (1),
 CC and truncated zcytor19 proteins. (1) has immunosuppressive, cytostatic,
 CC antineoplastic, antitumor, neuroprotective, anti-inflammatory,
 CC antidiabetic, nephroprotective, dermatological, anti-HIV and haemostatic
 CC activities, and can be used in vaccines. (1) or an antibody binding (1)
 CC can be used for suppressing the immune system for reducing rejection of
 CC tissue or organ transplants and grafts and for treating T-cell specific
 CC leukemias or lymphomas and autoimmune diseases including rheumatoid
 CC arthritis, multiple sclerosis, diabetes mellitus, inflammatory bowel
 CC disease and Crohn's disease. The antibodies can also be used for treating
 CC immunologic renal diseases, glomerulonephritis, mesangiolipofliferative
 CC disease, chronic lymphocytic leukaemia, secondary glomerulonephritis or
 CC vasculitis associated with lupus, polyarteritis, scleroderma, HIV-related
 CC diseases, amyloidosis and haemolytic uremic syndrome. (1) and the
 CC antibodies can also be used for renal or urological neoplasms and
 CC multiple myelomas, asthma, bronchitis, emphysema and other chronic
 CC airway diseases. Human zcytor19 is located to chromosome 1, more
 CC specifically to chromosome 1p36.11. The present sequence encodes a human
 CC zcytor19 protein from the present invention.
 CC
 SQ Sequence 1563 BP; 335 A; 468 C; 471 G; 289 T; 0 other;
 Query Match 86.8%; Score 1278; DB 24; Length 1563;
 Best Local Similarity .914%; Pred. No. 0;
 Matches 1432; Conservative 0; Mismatches 0; Indels 134; Gaps 2;

DB 301 CGAAGGTTCTCCCAAGCTCCCTGGGTGAGGCCAATACCTGATTAACCTT 360
 QY 367 TTTGAAGGAGCGGAGCCCACTGCTGGTGTCAACCAAGAGAGATCTTGAGT 426
 DB 361 TTTGAAGGAGCGGAGCCCACTGCTGGTGTCAACCAAGAGAGATCTTGAGT 420
 QY 427 GCGAATGCAAGTACCAAGCTGCCCCCTGCAATGCCCACTGATTTGAATGATG 486
 DB 421 GCGAATGCAAGTACCAAGCTGCCCCCTGCAATGCCCACTGATTTGAATGATG 480
 QY 487 GCAATTTGGAAGAGGAGGAGCCGAAACAAAGACCTATTTCTCACTGCTCCCATG 546
 DB 481 GCAATTTGGAAGAGGAGGAGCCGAAACAAAGACCTATTTCTCACTGCTCCCATG 540
 QY 547 CCAATGCAAGTACCTTCCAGGAGCTGCAAGGCAACCACTGCTGATGCTCCAGAAC 606
 DB 541 CCAATGCAAGTACCTTCCAGGAGCTGCAAGGCAACCACTGCTGATGCTCCAGAAC 600
 QY 607 ATCTACAGTTCAAGTGTCCGAAATACAGCAAGTTCTGTAAGCCACTGCTTTGCTG 666
 DB 601 ATCTACAGTTCAAGTGTCCGAAATACAGCAAGTTCTGTAAGCCACTGCTTTGCTG 660
 QY 667 GAGGTCCA----- 675
 DB 661 GAGGTCCAAGAACCACTGAGCTTCTGATGCTGCAATGCTTGTATTA 720
 QY 676 ----- 675
 DB 721 GTAATGCCGAGGAGGTGTATCTGGAAGACCTCAATGAGAACCCCTGATTCAGCG 780
 QY 676 -----GACTTTTCTGGAACAACAACCTGATGCACTTTGAG 715
 DB 781 GCAAGATGCAAGGAGCCCTGGAATTTCTGGAACAACAACCTGATGCACTTTGAG 840
 QY 716 CCGAGCAAGCAAGTGTCTGTAATGATTTCTGATGCTCCCAAGAAAGAACTGACCA 775
 DB 841 CCGAGCAAGCAAGTGTCTGTAATGATTTCTGATGCTCCCAAGAAAGAACTGACCA 900
 QY 776 GGGGTCAAGGCGGAGCTGATGAGGAGCCCAAGCAACCAAGCAAGATGAGAGAG 835
 DB 901 GGGGTCAAGGCGGAGCTGATGAGGAGCCCAAGCAACCAAGCAAGATGAGAGAG 960
 QY 836 GACCTGCAAGAGCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 895
 DB 961 GACCTGCAAGAGCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1020
 QY 896 CAGCCTTAATGAAACACTTCTTCTGAGGCAAGAGCAAGGCTTCAGAGCACTCG 955
 DB 1021 CAGCCTTAATGAAACACTTCTTCTGAGGCAAGAGCAAGGCTTCAGAGCACTCG 1080
 QY 956 GAGGCTTTGAGGTGAGACTCAGAGAGCCCAAGGCTCTCTGATGCTCCCAAGGAG 1015
 DB 1081 GAGGCTTTGAGGTGAGACTCAGAGAGCCCAAGGCTCTCTGATGCTCCCAAGGAG 1137
 QY 1016 TCTCTGCTTGGATTTCTTCAAGCAAGAGCTGAGGCAAGCTGATGCTCTCTGAG 1075
 DB 1138 TCTCTGCTTGGATTTCTTCAAGCAAGAGCTGAGGCAAGCTGATGCTCTCTGAG 1197
 QY 1076 AGGCTGAGGCTCTCTGATTTGAGAGAGGAGGAGGAGGAGGAGGAGGAGGAG 1135
 DB 1198 AGGCTGAGGCTCTCTGATTTGAGAGAGGAGGAGGAGGAGGAGGAGGAGGAG 1257
 QY 1136 GGGCAACAAAGATCTTCTCCACCACTGAAATTTCTCAAGAGACTGGGTTTCTGAG 1195
 DB 1258 GGGCAACAAAGATCTTCTCCACCACTGAAATTTCTCAAGAGACTGGGTTTCTGAG 1217
 QY 1196 CTCCCAAGAAATTAACCTCTCTCTGAGGCACTGAGGCACTTAACAACGAGACGAAT 1255
 DB 1318 CTCCCAAGAAATTAACCTCTCTCTGAGGCACTGAGGCACTTAACAACGAGACGAAT 1377
 QY 1256 CTGGTCCCTGGGAGACCCCAAGTTTCTTCAAGCACTGACCTGCTGAGAAAGAGC 1315

Db	1378	CTGGTCCCTGGGGAGACCCCAAGTTCCTTCACACACTGACCTTCTGCTGGAGAAAGAC	1437
Qy	1316	CTTGAAGAGAGAGAGAGCGCGAGGGATCTGAAATTGAGAGACAGCGATGCGGCAAGCTGG	1375
Db	1438	CTTGAAGAGAGAGAGAGCGCGAGGGATCTGAAATTGAGAGACAGCGATGCGGCAAGCTGG	1497
Qy	1376	GGGCGCTGAGACACCCAGAGAGACCGAGGACGAGGGCGCGGACATTGGGGCATTTGATGGCC	1435
Db	1498	GGGCGCTGAGACACCCAGAGAGACCGAGGACGAGGGCGCGGACATTGGGGCATTTGATGGCC	1557
Qy	1436	AGCTGA 1441	
Db	1558	AGCTGA 1563	
RESULT 2 :			
AD50487	AD50487	standard; cDNA; 1563 BP.	
AC	AA	AD50487;	
XX	XX	24-MAR-2003 (first entry)	
DT	DE	Human zcytor19 receptor cDNA.	
XX	XX	Human; leukaemia; carcinoma; acquired immune deficiency syndrome; AIDS;	
KW	KW	melanoma; Kaposi's sarcoma; multiple myeloma; non-Hodgkin's lymphoma;	
KW	KW	hepatitis; infection; myocarditis; blood vessel formation; gene therapy;	
KW	KW	growth regulation; developmental process; immunotherapy; zcytor19; gene;	
XX	XX	receptor; 86.	
XX	OS	Homo sapiens.	
XX	XX	Key	
FT	FT	Location/Qualifiers	
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FT	FT	/product= "human zcytor19 receptor"	
FT	FT	1..60	
FT	FT	/*tag= b	
FT	FT	61..1560	
FT	FT	/*tag= c	
FT	FT	/product= "Mature human zcytor19 receptor"	
XX	PN	W0200286087-A2.	
XX	PD	31-OCT-2002.	
XX	PP	19-APR-2002; 2002WO-US12887.	
XX	XX	20-APR-2001; 2001US-285408P.	
PR	PR	20-APR-2001; 2001US-285424P.	
PR	PR	25-APR-2001; 2001US-286482P.	
PR	PR	29-JUN-2001; 2001US-0895834.	
PR	PR	22-OCT-2001; 2001US-341050P.	
PR	PR	22-OCT-2001; 2001US-341105P.	
XX	XX	(Zymo) ZYMOGENETICS INC.	
PA	PI	Sheppard PO, Fox BA, Klueher KM, Taft DW, Kindavogel WR,	
XX	XX	WPI; 2003-093122/08.	
DR	DR	P-PSDB; AAB32768.	
XX	XX	New zcyto20, zcyto21, zcyto22, zcyto24 and zcyto25 polypeptides and	
PT	PT	polynucleotides useful for treating leukemia, carcinoma, malignant	
PT	PT	lymphoma, AIDS-related Kaposi's sarcoma, myeloma, non-Hodgkin's	
XX	XX	lymphoma, hepatitis and infections	
PS	PS	Example 30; Page 147-148; 160p; English.	
CC	CC	The invention relates to zcyto20, zcyto21, zcyto22, zcyto24 and zcyto25	
CC	CC	polypeptides and polynucleotides. Sequences of the invention are useful	
CC	CC	for treating hairy cell leukemia, renal cell or basal cell carcinoma,	

Query Match:	86.8%;	Score 1278;	DB 25;	Length 1563;
Best Local Similarity	91.4%;	Pid. No. 0;		
Matches 1432;	Conservative	0;	Mismatch	0;
			Indels	134;
			Gaps	2;
CC malignant melanoma, AIDS-related Kaposi's sarcoma, multiple myeloma, non-Hodgkin's lymphoma, hepatitis B, C or D, infections (e.g. bacterial, fungal or protozoal) or mycobacteriosis. The invention is useful for growth regulation in the liver, blood vessel formation and other developmental processes. The invention is also useful in immunotherapy and gene therapy. The present sequence is human zcyto19 receptor cDNA.				
XX				
Sequence 1563 BP; 335 A; 468 C; 471 G; 289 T; 0 other;				
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1	ATGCGGGGGCCCGAGCGTGGGGGCCCCCTCTCTGTGTCTGTGCAAGCGCGCTCAAGGG			
67	AGGCCCCCTGCGGCCCCCTCCCGAAGTGAAGCTCTCCCGAAGCTTACCGCTGTC			
61	AGGCCCCCTGCGGCCCCCTCCCGAAGTGAAGCTCTCTCCCGAAGCTTACCGCTGTC			
127	CTGACATGAGCTCCCGAGGGCTTGGCAACCCCGAGATGTACCTATTGTTGGCTATCAG			
121	CTGACATGAGCTCCCGAGGGCTTGGCAACCCCGAGATGTACCTATTGTTGGCTATCAG			
187	AGCTCTCCACCCGCTGAGCGGTGGGCGAAGTGAAGATGTGCGGGACCAAGAGACTG			
181	AGCTCTCCACCCGCTGAGCGGTGGGCGAAGTGAAGATGTGCGGGACCAAGAGACTG			
247	CTATGTTCTATGATGTGCTCTGAAGAAACAGACCTGTATACAAAGTTCAAGGACCGTG			
241	CTATGTTCTATGATGTGCTCTGAAGAAACAGACCTGTATACAAAGTTCAAGGACCGTG			
307	CGGACGGTTTTCTCCAGCTCCAGTCCCTCTGGTGGAGTCCGAATACCTGGAATTA			
301	CGGACGGTTTTCTCCAGCTCCAGTCCCTCTGGTGGAGTCCGAATACCTGGAATTA			
367	TTTGAAGTGGAGCGGCGCCCACTGTCTCTGTGTCTCAACCGCAAGGAGAGATCGAGT			
361	TTTGAAGTGGAGCGGCGCCCACTGTCTCTGTGTCTCAACCGCAAGGAGAGATCGAGT			
427	GGCAATGCACTATGCAAGTGTCCCCCTCTGCAAGCCCACTGATTTGAAGTGA			
421	GGCAATGCACTATGCAAGTGTCCCCCTCTGCAAGCCCACTGATTTGAAGTGA			
487	GCATTTGGAAGAGGGGGGCGGGAACAGACCTTATTTCCAGTCACTTCCCATGGCCAG			
481	GCATTTGGAAGAGGGGGGCGGGAACAGACCTTATTTCCAGTCACTTCCCATGGCCAG			
547	CGAAGTCCAGATCACTCTCCAGCGAGCTGCGAAGGAACACCTGTCTCAATGCAAGAAC			
541	CGAAGTCCAGATCACTCTCCAGCGAGCTGCGAAGGAACACCTGTCTCAATGCAAGAAC			
607	ATCTACAGCTTCAAGTGTCCGAAATACAGCAAGTTCTTAAAGCCCACTGCTTCTGCTG			
601	ATCTACAGCTTCAAGTGTCCGAAATACAGCAAGTTCTTAAAGCCCACTGCTTCTGCTG			
667	GAGGTCCCA-----			
661	GAGGTCCCAAGAACCAACTGGGGCTTCTCTGTGTGTGCTCATGCTTCAATGACTGTGA			
676	-----			
721	GTAATGCCGCAAGGGGGTGTATCTGGAAGACCTTCAAGGGAAACCTGTGTTCAAGCG			
676	-----GGACTTTTCTGGAACAACAACCTGTGGAACCTTTTTCAG			
781	GCAAGATGCCACGGGCGCTGGAATTTTCTGGAACAACAACCTGTGGAACCTTTTTCAG			
716	CCGACGACAGACGAGTCCGTGAATGAATTTTCTCTGTGCCCAAAAGAACTGACAGA			
841	CCGACGACAGACGAGTCCGTGAATGAATTTTCTCTGTGCCCAAAAGAACTGACAGA			

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Oy 776 GGGGTGAGGCGGAGCGCTGAGTCAAGGCGCCAGCCACCAAGACAGATGGAAGAG 835
Db 901 GGGGTGAGGCGGAGCGCTGAGTCAAGGCGCCAGCCACCAAGACAGATGGAAGAG 960
Oy 836 GACCTTGCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 895
Db 961 GACCTTGCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1020
Oy 896 CAGCCCTGATGGAACACCTTCTTCTCTGGGGGAGAGAGAGAGAGAGAGAGAGAG 955
Db 1021 CAGCCCTGATGGAACACCTTCTTCTCTGGGGGAGAGAGAGAGAGAGAGAGAGAG 1080
Oy 956 GAGGCCTTTGGTGGGGTGAAGCTCAGGAGAGAGAGAGAGAGAGAGAGAGAGAG 1015
Db 1081 GAGGCCTTTGGTGGGGTGAAGCTCAGGAGAGAGAGAGAGAGAGAGAGAGAGAG 1137
Oy 1016 TCCTCTGCTGGAGATTTCTTCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1075
Db 1138 TCCTCTGCTGGAGATTTCTTCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1197
Oy 1076 AGGGCTGGCTCTCTGCTATTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1135
Db 1198 AGGGCTGGCTCTCTGCTATTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1257
Oy 1136 GGGGACCAAGATCTCTCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1195
Db 1258 GGGGACCAAGATCTCTCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1317
Oy 1196 CTCCGAGAGATTAACCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1255
Db 1318 CTCCGAGAGATTAACCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1377
Oy 1256 CTGCTCTCTGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1315
Db 1378 CTGCTCTCTGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1437
Oy 1316 CCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1375
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Oy 1376 GGGGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1435
Db 1498 GGGGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1557
Oy 1436 AGGTGA 1441
Db 1558 AGGTGA 1563

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RESULT 3
 ABQ73068
 ID ABQ73068 standard; cDNA, 1476 BP.
 XX
 AC ABQ73068;
 DT 25-SEP-2002 (first entry)
 DE Human zcytor19 encoding cDNA SEQ ID NO.1.
 XX

Human zcytor19; cytokine receptor; immunosuppressive; cytostatic;
 antineutritic; antineutritic; neuroprotective; antiinflammatory;
 antidiabetic; nephrotropic; dermatological; anti-HIV; haemostatic;
 vaccine; immune system; T-cell specific leukaemia; lymphoma; lupus;
 autoimmune disease; rheumatoid arthritis; multiple sclerosis; HIV;
 diabetes mellitus; inflammatory bowel disease; Crohn's disease; asthma;
 immunologic renal disease; glomerulonephritis; vasculitis; polyarteritis;
 mesangiolipoferrative disease; chronic lymphocytic leukaemia; bronchitis;
 haemolytic uraemic syndrome; scleroderma; amyloidosis; multiple myeloma;
 emphysema; chronic airway disease; chromosome 1; chromosome 1p36.11;
 gene; ss.
 XX
 OS Homo sapiens.

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XX Key Location/Qualifiers
FH CDS 1..1473
FT sig_peptide /tag= a
FT sig_peptide /product= "zcytor19"
FT mat_peptide /tag= b
FT mat_peptide /tag= c
FT mat_peptide /product= "mature zcytor19"
XX
XX MO200244209-A2.
XX
XX 06-JUN-2002.
XX
XX 28-NOV-2001; 2001MO-US44808.
XX
XX 28-NOV-2000; 2000US-253561P.
XX
XX 07-FEB-2001; 2001US-267211P.
XX
XX (ZYMO ) ZYMOGENETICS INC.
XX
XX Presnell SR, Xu W, Novak JB, Whitmore TE, Grant FJ;
XX WPI, 2002-527700/56.
XX P-PDB; AB881636.
XX
XX Novel Zcytor19 polypeptides and polynucleotides useful for stimulating
XX immune responses in animals for producing antibodies, and for treating
XX autoimmune diseases, leukemia and asthma -
XX
XX Claim 2, Page 160-163, 200p; English.
XX
XX The present invention describes an isolated human zcytor19 protein (I),
XX and truncated zcytor19 proteins. (I) has immunosuppressive, cytostatic,
XX antineutritic, antineutritic, neuroprotective, antiinflammatory,
XX antidiabetic, nephrotropic, dermatological, anti-HIV and haemostatic
XX activities, and can be used in vaccines. (I) or an antibody binding (I)
XX can be used for suppressing the immune system for reducing rejection of
XX tissue or organ transplants and grafts and for treating T-cell specific
XX leukemias or lymphomas and autoimmune diseases including rheumatoid
XX arthritis, multiple sclerosis, diabetes mellitus, inflammatory bowel
XX disease and Crohn's disease. The antibodies can also be used for treating
XX immunologic renal diseases, glomerulonephritis, mesangiolipoferrative
XX disease, chronic lymphocytic leukaemia, secondary glomerulonephritis or
XX vasculitis associated with lupus, polyarteritis, scleroderma, HIV-related
XX diseases, amyloidosis and haemolytic uraemic syndrome. (I) and the
XX antibodies can also be used for renal or urological neoplasms and
XX multiple myelomas, asthma, bronchitis, emphysema and other chronic
XX airway diseases. Human zcytor19 is located to chromosome 1; more
XX specifically to chromosome 1p36.11. The present sequence encodes a human
XX zcytor19 protein from the present invention.
XX
XX Sequence 1476 BP; 309 A; 439 C; 456 G; 272 T; 0 other;
XX
XX Query Match 85.5%; Score 1259; DB 24; Length 1476;
XX Best Local Similarity 92.8%; Pred. No. 0;
XX Matches 1372; Conservative 0; Mismatches 60; Indels 47; Gaps 3;
XX
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XX Db 1 ATGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 60
XX Oy 67 AGGCGGCTGTGGGCGCTCTCCAGAGATGAGAGAGAGAGAGAGAGAGAGAGAGAG 126
XX Db 61 AGGCGGCTGTGGGCGCTCTCCAGAGATGAGAGAGAGAGAGAGAGAGAGAGAGAG 120
XX Oy 127 CTGAGATGAGCTCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 186
XX Db 121 CTGAGATGAGCTCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 180
XX Oy 187 AGCTCTCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 246

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Db      181 AGCTTCCCAACCCGTAGACGGTGGCGGCAAGTGGAAAGTGTGCGGGAAACAAAGAGCTG 240
Qy      247 CTATGTTCTATGATGTTGCTTGAGAAACAGGACTGTACAAAGTTCAAGGAGCGCTG 306
Db      241 CTATGTTCTATGATGTTGCTTGAGAAACAGGACTGTACAAAGTTCAAGGAGCGCTG 300
Qy      307 CGAGAGGATTTCTCCAGCTCCAGTCCCTGAGGTGGAGTCCGAAATACCTGATTAACCTT 366
Db      301 CGAGAGGATTTCTCCAGCTCCAGTCCCTGAGGTGGAGTCCGAAATACCTGATTAACCTT 360
Qy      367 TTTGAGATGGAGACCGCGCCCACTGTCTGTGTCTACCCAGACGGAGAGATCTGAGT 426
Db      361 TTTGAGATGGAGACCGCGCCCACTGTCTGTGTCTACCCAGACGGAGAGATCTGAGT 420
Qy      427 GCCAATGCCAGTACCTGACGCTGCCCCCTGACAGCCCACTGATCTGAAGTATGAGT 486
Db      421 GCCAATGCCAGTACCTGACGCTGCCCCCTGACAGCCCACTGATCTGAAGTATGAGT 480
Qy      487 GCATTTCTGAGAGAGAGGGGGCCCGAAACCAAGCCCTATTCTCATCTCCCAATGCCAG 546
Db      481 GCATTTCTGAGAGAGAGGGGGCCCGAAACCAAGCCCTATTCTCATCTCCCAATGCCAG 540
Qy      547 CCACTTCAGATCACTCTCAGCGAGCTGCCAGGAAACCACTGCTCAGTCCAGAAAC 606
Db      541 CCACTTCAGATCACTCTCAGCGAGCTGCCAGGAAACCACTGCTCAGTCCAGAAAC 600
Qy      607 ATCTACACGTTTCAGTGTCCGAAATATACAGCAAGTTCTTAAAGCCACTCTTCTGCTG 666
Db      601 ATCTACACGTTTCAGTGTCCGAAATATACAGCAAGTTCTTAAAGCCACTCTTCTGCTG 660
Qy      667 GAGGTCCAGAGACTTTTCTGAGCACAC-----A 694
Db      661 GAGGTCCAGAGAGCAACTCTTCTGAGTCTGTCGATCTGCTGATCTGATCTGTTA 720
Qy      695 CACCTGTGCAACCTTTGAGCGCCAGAGACCAAGTCCGTAATGACTTTTCTCTCT 754
Db      721 GTATTTCCCGAGAGGGGTGTGATCTGAGAAACCTCATAGGAAACCTCTGTTTCAAGGG 780
Qy      755 CCCCAGAA-----AGGAATGACAGAGGGGTCAAGGCCGACCTTGAGTCAAG 802
Db      781 GCAAAGATGCCAGGGCCCTGGAACCTGACAGAGGGGTCAAGGCCGACCTTGAGTCAAG 840
Qy      803 GCCCAGCCACCCCAAGACAGATGAGAAAGGACCTTGAGAGAGAGAGAGAGAG 862
Db      841 GCCCAGCCACCCCAAGACAGATGAGAAAGGACCTTGAGAGAGAGAGAGAGAG 900
Qy      863 GATGAGAGAGACACAGAAATGGCTCAAGTTTCAAGCTTCAAGTCAAGCTTCTTTC 922
Db      901 GATGAGAGAGACACAGAAATGGCTCAAGTTTCAAGCTTCAAGTCAAGCTTCTTTC 960
Qy      923 CTGAGGCAAGAGCAACAGGCTCAAGGCACTCGAGGCT?TGTGTGGGTGAGCTCAAGG 982
Db      961 CTGAGGCAAGAGCAACAGGCTCAAGGCACTCGAGGCT---TGTGTGGGTGAGCTCAAGG 1017
Qy      983 AGGCGCAGGGCTCTCTGTGTTCCAGAGGACTCTCTGTGGATTTCTCAAGACGA 1042
Db      1018 AGGCGCAGGGCTCTCTGTGTTCCAGAGGACTCTCTGTGGATTTCTCAAGACGA 1077
Qy      1043 AGCTGGGCAAGCACTGTGACTCTCTGTGGACAGGGCTGGGTCTCTGTGCTATTGAGCT 1102
Db      1078 AGCTGGGCAAGCACTGTGACTCTCTGTGGACAGGGCTGGGTCTCTGTGCTATTGAGCT 1137
Qy      1103 GAGAAAGGGGCAAGGCAAGGGCCGGGTGGAGTGGGACCAAAATCTCTCCACACACT 1162
Db      1138 GAGAAAGGGGCAAGGCAAGGGCCGGGTGGAGTGGGACCAAAATCTCTCCACACACT 1197
Qy      1163 GAATTTCTCAAGACTCGGGTTTCTGAGAGAGCTCCCAAGAAATAACTTCTCTG 1222
Db      1198 GAATTTCTCAAGACTCGGGTTTCTGAGAGAGAGCTCCCAAGAAATAACTTCTCTG 1257
Qy      1223 GCCACTGAGGCACTTACACAGAGCGAATCTGTGCTCTGTGGGGAACCCCAAGTTCT 1282
Db      1258 GCCACTGAGGCACTTACACAGAGCGAATCTGTGCTCTGTGGGGAACCCCAAGTTCT 1317

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Qy      1283 CTTGAGACACTGACCTTTCTGTGGGAAAGAGCGCTTGAGAGAGAAAGAGAGCGAGGAA 1342
Db      1318 CTTGAGACACTGACCTTTCTGTGGGAAAGAGCGCTTGAGAGAGAAAGAGAGCGAGGAA 1377
Qy      1343 TCAGAAATTGAGACACAGGATGCGGGCAGCTGAGGAGCTGAGAGCAACCAAGAGACCAAG 1402
Db      1378 TCAGAAATTGAGACACAGGATGCGGGCAGCTGAGGAGCTGAGAGCAACCAAGAGACCAAG 1437
Qy      1403 GACAGGGGCGCGACATTGGGCAATTACATGACCAAGTCA 1441
Db      1438 GACAGGGGCGCGACATTGGGCAATTACATGACCAAGTCA 1476

RESULT 4
AAB50485
ID AAB50485 standard; cDNA, 1476 BP.
XX
AC AAB50485;
XX
DT 24-MAR-2003 (first entry)
XX
DE Human zcytor19 receptor variant cDNA.
XX
KW Human; leukemia; carcinoma; acquired immune deficiency syndrome; AIDS;
KW hepatitis; infection; myocarditis; blood vessel formation; gene therapy;
KW growth regulation; developmental process; immunotherapy; zcytor19; gene;
KW receptor; variant; 58.
XX
OS Homo sapiens.
XX
FH Key 1..1476 Location/Qualifiers
FT CDS /tag= a
FT /product= "Human zcytor19 receptor variant"
FT /tag= b
FT /tag= c
FT /tag= C
FT /product= "Mature human zcytor19 receptor variant"

MO20286087-A2.
XX
PD 31-OCT-2002.
XX
PF 19-APR-2002; 2002M0-US12887.
XX
PR 20-APR-2001; 2001US-285408P.
XX
PR 20-APR-2001; 2001US-285424P.
XX
PR 25-APR-2001; 2001US-286482P.
XX
PR 29-JUN-2001; 2001US-0895834.
XX
PR 22-OCT-2001; 2001US-341050P.
XX
PR 22-OCT-2001; 2001US-341105P.
XX
PA (ZYMO ) ZYMOGENETICS INC.
XX
PI Shepard PO, Fox BA, Klucher KM, Taft DW, Kindvogel WR;
XX
DR WPI; 2003-093122/08.
XX
P-PSDB; AAB32766.
XX
PT New zcyto20, zcyto21, zcyto22, zcyto24 and zcyto25 polypeptides and
PT polynucleotides useful for treating leukemia, carcinoma, malignant
PT melanoma, AIDS-related Kaposi's sarcoma, myeloma, non-Hodgkin's
PT lymphoma, hepatitis and infections
XX
PS Example 18; Page 136-139; 160pp; English.
XX
CC The invention relates to zcyto20, zcyto21, zcyto22, zcyto24 and zcyto25
CC polypeptides and polynucleotides. Sequences of the invention are useful
CC for treating hairy cell leukemia, renal cell or basal cell carcinoma,
CC malignant melanoma, AIDS-related Kaposi's sarcoma, multiple myeloma,

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XX (Zymo) ZYMOGENETICS INC.
 XX PA Presnell SR, Xu W, Novak JB, Whitmore TE, Grant FJ;
 XX WPI; 2002-527700/56.
 XX
 XX Novel zcytoris polypeptides and polynucleotides useful for stimulating
 PT immune responses in animals for producing antibodies, and for treating
 PT autoimmune diseases, leukemia and asthma -
 XX
 XX Disclosure; Page 165-166; 200pp; English.
 XX
 XX The present invention describes an isolated human zcytoris protein (1),
 CC and truncated zcytoris proteins. (1) has immunosuppressive, cytostatic,
 CC antineoplastic, antitumor, neuroprotective, anti-inflammatory,
 CC antidiabetic, nephroprotective, dermatological, anti-HIV and haemostatic
 CC activities, and can be used in vaccines. (1) or an antibody binding (1)
 CC can be used for suppressing the immune system for reducing rejection of
 CC tissue or organ transplants and grafts and for treating T-cell specific
 CC leukemias or lymphomas and autoimmune diseases including rheumatoid
 CC arthritis, multiple sclerosis, diabetes mellitus, inflammatory bowel
 CC disease and Crohn's disease. The antibodies can also be used for treating
 CC immunologic renal diseases, glomerulonephritis, mesangiolipidiferative
 CC disease, chronic lymphocytic leukemia, secondary glomerulonephritis or
 CC vasculitis associated with lupus, polyarteritis, scleroderma, HIV-related
 CC diseases, amyloidosis and haemolytic uremic syndrome. (1) and the
 CC antibodies can also be used for renal or urological neoplasms and
 CC multiple myelomas, ascites, bronchitis, emphysema and other chronic
 CC allergic diseases. Human zcytoris is located to chromosome 1, more
 CC specifically to chromosome 1p36.11. The present sequence represents a
 CC degenerate nucleotide sequence encoding a human zcytoris protein from
 CC the present invention.
 XX
 XX Sequence 1473 BP; 203 A; 195 C; 278 G; 164 T; 633 other;
 SO
 Query Match 58.5%; Score 861.8; DB 24; Length 1473;
 Best Local Similarity 52.5%; Pred. No. 5.1e-215;
 Matches 775; Conservative 320; Mismatches 333; Indels 47; Gaps 3;
 7 ATGCGCGGCGCCGAGCGCTGGGGCCCTCTGCTGCTGCTGCGAGCCCTCCAGAG 66
 1 ATGCGCGGCGCCGAGCGCTGGGGCCCTCTGCTGCTGCTGCGAGCCCTCCAGAG 60
 67 AGCGCCCGCTGCGCCCTCCAGAGCGCTGCTGCTGCTGCGAGCCCTCCAGAG 126
 61 MGNCCMNGNCCGAGCGCTGGGGCCCTCTGCTGCTGCTGCGAGCCCTCCAGAG 120
 127 CTGACATGCTGCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 186
 121 YTNACGTGCTGCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 180
 187 AGCTCTCCGAGCGCTGGGGCCCTCTGCTGCTGCTGCGAGCCCTCCAGAG 246
 181 MGNCCMNGNCCGAGCGCTGGGGCCCTCTGCTGCTGCTGCGAGCCCTCCAGAG 240
 247 CTATGCTCTGCTGCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 306
 241 YTNACGTGCTGCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 300
 307 CGAGCGCTGCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 366
 301 MGNCCMNGNCCGAGCGCTGGGGCCCTCTGCTGCTGCTGCGAGCCCTCCAGAG 360
 367 TTGAGATGAGCGCGCCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 426
 361 TTGAGATGAGCGCGCCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 420
 427 GCGATGCGAGCGCGCCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 486
 421 GCGATGCGAGCGCGCCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 480
 487 GCGATGCGAGCGCGCCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 546

DB 481 GCGATGCGAGCGCGCCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 540
 QY 547 CCAGTCCAGATCCTCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 606
 DB 541 CCAGTCCAGATCCTCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 600
 QY 607 ATCTACAGTTCAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 666
 DB 601 ATCTACAGTTCAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 660
 QY 667 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 721
 DB 661 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 720
 QY 722 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 754
 DB 721 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 780
 QY 755 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 802
 DB 781 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 840
 QY 803 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 862
 DB 841 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 900
 QY 863 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 922
 DB 901 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 960
 QY 923 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 982
 DB 961 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1017
 QY 983 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1042
 DB 1018 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1077
 QY 1043 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1102
 DB 1078 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1137
 QY 1103 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1162
 DB 1138 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1197
 QY 1163 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1222
 DB 1198 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1257
 QY 1223 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1282
 DB 1258 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1317
 QY 1283 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1342
 DB 1318 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1377
 QY 1343 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1402
 DB 1378 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1437
 QY 1403 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1437
 DB 1438 GAGTTCCTCCAGAGCGCTGGGGCCCTCTGCTGCTGCGAGCCCTCCAGAG 1472

RESULT 6
 AB073085
 ID AB073085 standard; cDNA; 1560 BP.
 XX
 AC AB073085;

Dd		1138	MENMNSNGNTGGAGYYMSNMSNCAYMGKMSNTYGGCWMSSAACCMTGNGAYMSMSNTGGAGY	1197
Oy		1076	AGCGGTGGGTCTCTGCGTATTATTTGGCTGAGAGAAGGGCCACGAGCCAAGGGCCGGGGTGGGGAAT	1135
Dd		1198	MENGNCGMSSMSNSNGNTAAYYTMGCNGARBAAGGANCNGSGICARGANCCNGGNGNGAY	1257
Oy		1136	GCGCACCAAGATCTCTGCCACAACCTGAATTCTCCAGAGACTCGGGGTTTCCTGGAAG	1195
Dd		1258	GGNCAYCARBARMSNYTNCCNCCNCGARTTYMSNAAGAMSGNTTTYTMNGRGR	1317
Oy		1196	CITCCCAGAAAGTAACCTCTCTCCCTGGGCCAACCTGGGGGACCTTACCAACGGAGCCGAAT	1255
Dd		1318	YTNCCNARGARGAAYATYTNMSNSNTGGCCNACVTGGGAAACMYTNCCNCCNARGCCNAAY	1377
Oy		1256	CTGGTCCCTGGGGGACCCCCAGATTCTCTTCAGACACTGACCTTCTGCTGGGGAACAGCC	1315
Dd		1378	YTMGNCCNCGSNGNCCNCCNMTSMSTNYTCABACMYTACCTTYTGTCGARMSMSN	1437
Oy		1316	CCTGAGAGAGAGAGAGGCGAGGGGANTCAGAAATTGAGACAGAGATGGGGCACTGG	1375
Dd		1438	CCNARGARGARBARCARBCCMGNGARKSRNSGATTTGARGATWSNGATCCNCGMSNTGG	1497
Oy		1376	GCGGCTTGAGACACCCAGAGAGACCGAGACAAGGGCCCGGACATTTGGGGCATTAATGGCC	1435
Dd		1498	GGNGCNARGMSNACNCRARMGNAACNGARGAYMGNGMWGNAICYTATGNGCAYTAYATGGCN	1557
Oy		1436	AG 1437	
Dd		1558	MG 1559	
RESULT 7				
ABQ73080				
ID	ABQ73080	standard;	cdna;	1422 BP.
XX	ABQ73080;			
DT	25-SEP-2002	(first entry)		
DE	Zcytor19, and Fc4 fusion protein encoding cdna SEQ ID NO:22.			
KM	Human; zcytor19; cytokine receptor; immunosuppressive; cytostatic;			
KM	antithymetic; antiarthritis; neuroprotective; antiinflammatory;			
KM	antidiabetic; nephrotropic; dermatological; anti-HIV; haemostatic;			
KM	vaccine; immune system; T-cell specific leukaemia; lymphoma; lupus;			
KM	diabetes mellitus; inflammatory bowel disease; Crohn's disease; asthma;			
KM	immunologic renal disease; glomerulonephritis; vasculitis; polyarteritis;			
KM	mesangiolipidiferative disease; chronic lymphocytic leukaemia; bronchitis;			
KM	secondary glomerulonephritis; scleroderma; angiodosis; multiple myeloma;			
KM	hemolytic uremic syndrome; renal neoplasm; urological neoplasm;			
KM	emphysema; chronic airway disease; chromosome 1; chromosome 1p36.11;			
KM	gene; ss.			
XX				
OS	Homo sapiens.			
OS	Synthetic.			
XX				
FH	Key	Location/Qualifiers		
FT	CDS	1..1422		
FT	/tag= a			
FT	/product= "zcytor19-Fc4 fusion protein"			
XX				
FN	MO200244209-AZ.			
PD	06-JUN-2002.			
XX				
PP	28-NOV-2001; 2001WO-US44808.			
FR	28-NOV-2000; 2000US-253561P.			
FR	07-FEB-2001; 2001US-267211P.			
XX				
PA	(ZYMO) ZYMOGENETICS INC.			

Query Match	41.6%	Score 612.8	DB 24	Length 1422
Best: Local Similarity	98.9%	Pred. No. 5.9e-150		
Matches 617	Conservative 0	Mismatches 7	Indels 0	Gaps 0
67	AGGCCCCGCTCTGGCCCCCTTCCCGAAGTGTACCGCTCTCTCCGAGACTTCAGCGCTGAC	126		
109	AGGCCCCGCTCTGGCCCCCTTCCCGAAGTGTACCGCTCTCTCCGAGACTTCAGCGCTGAC	168		
127	CTGACATGCGCTCCCAAGGCGTTTGCGCAACCCCGAGAGTGTACCTATTGTTGCGCCCTATACG	186		
169	CTGACATGCGCTCCCAAGGCGTTTGCGCAACCCCGAGAGTGTACCTATTGTTGCGCCCTATACG	228		
187	AGCTCTCCACCCGTTGAGAGCGTGGCGGGAAGTGTGAGAGTGTGCGGAAACGAGACGCTG	246		
229	AGCTCTCCACCCGTTGAGAGCGTGGCGGGAAGTGTGAGAGTGTGCGGAAACGAGACGCTG	288		
247	CTATGTTCTATGATGTGCTCTGAGAAACAGAGACCTGTATCAACAGATTTCAGAGACGCGTG	306		
289	CTATGTTCTATGATGTGCTCTGAGAAACAGAGACCTGTATCAACAGATTTCAGAGACGCGTG	348		
307	CGGAGCGGTTTCTCCGAGCTCCGAGGCGCCCGTGGTGGAGTGTCCGAAATACCTGGAGATTACCTT	366		
349	CGGAGCGGTTTCTCCGAGCTCCGAGGCGCCCGTGGTGGAGTGTCCGAAATACCTGGAGATTACCTT	408		
367	TTTGAATGTGAGCGCGGCGCCCAACTGTCTCTGAGTGTCAACCCAGACGAGAGAGATCTTAAGT	426		
409	TTTGAATGTGAGCGCGGCGCCCAACTGTCTCTGAGTGTCAACCCAGACGAGAGAGATCTTAAGT	468		
427	GCCATATGCACTGACAGCTGCGCCCGCTGCAATCCCGCCCACTGAGATCTGAGATGAGAGTG	486		
469	GCCATATGCACTGACAGCTGCGCCCGCTGCAATCCCGCCCACTGAGATCTGAGATGAGAGTG	528		
487	GCAATTCGAG	546		
529	GCAATTCGAG	588		
547	CGAGTCGAGATCACTCTCCAGCGAGCTGCGAGGAAACCAACATGCTCTGAGTCCAGAACCC	606		
589	CGAGTCGAGATCACTCTCCAGCGAGCTGCGAGGAAACCAACATGCTCTGAGTCCAGAACCC	648		

QY 607 ATCTACAGTTCAGTGTCCGAAATACAGACAGTCTCTAGACCCACCTGCTTCTGCTG 666
 DB 649 ATCTACAGTTCAGTGTCCGAAATACAGACAGTCTCTAGACCCACCTGCTTCTGCTG 708
 QY 667 GAGTCCCGACGACTTTCTGACGA 690
 DB 709 GAGTCCCGACGACTTTCTGACGA 732

RESULT 8
 ID ABO73089 standard; cDNA; 1922 BP.
 AC ABO73089;
 XX 25-SEP-2002 (first entry)
 DE MBP and zcytor19 fusion protein encoding cDNA SEQ ID NO:32.
 XX Human; zcytor19; cytokine receptor; immunosuppressive; cytosolic;
 KM antirheumatic; antirheumatic; neuroprotective; anti-inflammatory;
 KM antidiabetic; nephroprotective; dermatologic; anti-HIV; haemostatic;
 KM vaccine; immune system; T-cell specific leukemia; lymphoma; lupus;
 KM autoimmune disease; rheumatoid arthritis; multiple sclerosis; HIV;
 KM diabetes mellitus; inflammatory bowel disease; Crohn's disease; asthma;
 KM immunologic renal disease; glomerulonephritis; vasculitis; polyarteritis;
 KM mesangiolipoferrative disease; chronic lymphocytic leukemia; bronchitis;
 KM secondary glomerulonephritis; scleroderma; amyloidosis; multiple myeloma;
 KM hemolytic uraemic syndrome; renal neoplasm; urological neoplasm;
 KM gene; ss.
 XX OS Homo sapiens.
 XX Synthetic.
 XX Key Location/Qualifiers
 FT 123..1922
 FT CDS /tag= a
 FT /product= "maltose binding protein (MBP) and human
 PN zcytor19 fusion protein"
 XX WO200244209-A2.
 PD 06-JUN-2002.
 XX 28-NOV-2001; 2001MO-US44808.
 PF 28-NOV-2000; 2000US-253561P.
 PR 07-FEB-2001; 2001US-267211P.
 XX (ZYMO) ZYMOGENETICS INC.
 PA Presnell SR, Xu W, Novak JE, Whitmore TE, Grant FU;
 PI WPI; 2002-527700/56.
 DR P-PSDB; ABB81646.
 XX Novel Zcytor19 polypeptides and polynucleotides useful for stimulating
 PT immune responses in animals for producing antibodies, and for treating
 PT autoimmune diseases, leukemia and asthma.
 XX Example 10; Page 189-193; 200pp; English.
 XX The present invention describes an isolated human zcytor19 protein (1),
 CC and truncated zcytor19 proteins. (1) has immunosuppressive, cytosolic,
 CC antirheumatic, antirheumatic, neuroprotective, anti-inflammatory,
 CC antidiabetic, nephroprotective, dermatologic, anti-HIV and haemostatic
 CC activities, and can be used in vaccines. (1) or an antibody binding (1)
 CC can be used for suppressing the immune system for reducing rejection of
 CC tissue or organ transplants and grafts and for treating T-cell specific
 CC leukemias or lymphomas and autoimmune diseases including rheumatoid
 CC arthritis, multiple sclerosis, diabetes mellitus, inflammatory bowel
 CC disease and Crohn's disease. The antibodies can also be used for treating

CC immunologic renal diseases, glomerulonephritis, mesangiolipoferrative
 CC disease, chronic lymphocytic leukemia, secondary glomerulonephritis or
 CC vasculitis associated with lupus, polyarteritis, scleroderma, HIV-related
 CC diseases, amyloidosis and haemolytic uraemic syndrome. (1) and the
 CC antibodies can also be used for renal or urological neoplasms and
 CC multiple myelomas, asthma, bronchitis, emphysema and other chronic
 CC airway diseases. Human zcytor19 is located to chromosome 1, more
 CC specifically to chromosome 1p36.11. The present sequence encodes a
 CC maltose binding protein (MBP) and human zcytor19 fusion protein from
 CC the present invention.
 XX SQ Sequence 1922 BP; 503 A; 517 C; 503 G; 399 T; 0 other;
 XX Query Match 41.5%; Score 611.6; DB 24; Length 1922;
 XX Best Local Similarity 97.0%; Pred. No. 1,4e-149;
 XX Matches 623; Conservative 0; Mismatches 19; Indels 0; Gaps 0;
 QY 46 CTGCTGCAAGGCGCTCCAGGAGGCGCGCTGCGCCCTCCCGAAGTGAACCTGCTC 105
 DB 1266 CCGCTGTGTCGGCTGATCCAGGCGCGCGCTGCGCCCTCCCGAAGTGAACCTGCTC 1325
 QY 106 TCCGAGAACTTCAAGGCTGATCACTGACATGAGCTCCAGGCTTGGCAACCCCGAGATG 165
 DB 1326 TCCGAGAACTTCAAGGCTGATCACTGACATGAGCTCCAGGCTTGGCAACCCCGAGATG 1385
 QY 166 ACTATTTTGTGGCTTATCAGAGCTTCCACCGGTAGACGGTGGCGGAAATGGAAG 225
 DB 1386 ACTATTTTGTGGCTTATCAGAGCTTCCACCGGTAGACGGTGGCGGAAATGGAAG 1445
 QY 226 TGTGCGGAAACCAAGAGCTGCTATGTTCTAATGATGCTGGAAGAAACAGACCTGAC 285
 DB 1446 TGTGCGGAAACCAAGAGCTGCTATGTTCTAATGATGCTGGAAGAAACAGACCTGAC 1505
 QY 286 AACAGTTTAAAGGAGACGGGTGCGGAGCGTTTCTCCAGCTCCAGTCCCTGGGTGAG 345
 DB 1506 AACAGTTTAAAGGAGACGGGTGCGGAGCGTTTCTCCAGCTCCAGTCCCTGGGTGAG 1565
 QY 346 TCCGAATTAATGATTAATCTTTTGAAGTGAAGCGGCGCCAGCTGCTGCTGCTAC 405
 DB 1566 TCCGAATTAATGATTAATCTTTTGAAGTGAAGCGGCGCCAGCTGCTGCTGCTAC 1625
 QY 406 CAGACGAGAGAGATCTGAGATGCAATGCAATGCAATGCAATGCAATGCAATGCAATG 465
 DB 1626 CAGACGAGAGAGATCTGAGATGCAATGCAATGCAATGCAATGCAATGCAATGCAATG 1685
 QY 466 CTGAGATCGAAGTATGAGTGGCAATCTGGAAGAGGGGGCGGAAACAAAGCCCTAATT 525
 DB 1686 CTGAGATCGAAGTATGAGTGGCAATCTGGAAGAGGGGGCGGAAACAAAGCCCTAATT 1745
 QY 526 CAGATCACTCCCGCAATGAGCAAGTCAATGCAATGCAATGCAATGCAATGCAATGCA 585
 DB 1746 CAGATCACTCCCGCAATGAGCAAGTCAATGCAATGCAATGCAATGCAATGCAATGCA 1805
 QY 586 CACTGCTTCAGTCCGCAACCAATCTACAGTTCAGTTCGGAATACAGCAAGTTCTCT 645
 DB 1806 CACTGCTTCAGTCCGCAACCAATCTACAGTTCAGTTCGGAATACAGCAAGTTCTCT 1865
 QY 646 AAGCCCACTGCTTCTGCTGAGAGTCCAGGACTTTTCTGG 687
 DB 1866 AAGCCCACTGCTTCTGCTGAGAGTCCAGGACTTTTCTGG 1907

RESULT 9
 ID ABO73079 standard; cDNA; 673 BP.
 AC ABO73079;
 XX 25-SEP-2002 (first entry)
 DE Human truncated soluble zcytor19 encoding cDNA SEQ ID NO:20.
 XX Human; zcytor19; cytokine receptor; immunosuppressive; cytosolic;

KM antirheumatic; antifibrotic; neuroprotective; antiinflammatory;
 KM antidiabetic; nephrotropic; dermatological; anti-HIV; haemostatic;
 KM vaccine; immune system; T-cell specific; leukaemia; lymphoma; lupus;
 KM autoimmune disease; rheumatoid arthritis; multiple sclerosis; HIV;
 KM diabetes mellitus; inflammatory bowel disease; Crohn's disease; asthma;
 KM immunologic renal disease; glomerulonephritis; vasculitis; polyarteritis;
 KM mesangiolipolytic disease; chronic lymphocytic leukaemia; bronchitis;
 KM secondary glomerulonephritis; scleroderma; amyloidosis; multiple myeloma;
 KM haemolytic uraemic syndrome; renal neoplasm; urological neoplasm;
 KM emphysema; chronic airway disease; chromosome 1; chromosome 1p36.11;
 KM gene; 88.

OS Homo sapiens.

XX Key Location/Qualifiers

XX CDS 1..636
 FT /*tag= a
 FT /product= "truncated soluble zcytor19"

FT sig_peptide 1..60
 FT /*tag= b
 FT /*tag= c
 FT /product= "mature truncated soluble zcytor19"

FT mat_peptide 61..633
 FT /*tag= c
 FT /product= "mature truncated soluble zcytor19"

XX WO200244209-A2.

XX PD 06-JUN-2002.

XX PP 28-NOV-2001; 2001MO-US44808.

XX PR 28-NOV-2000; 2000US-253561P.

XX PR 07-FEB-2001; 2001US-267211P.

XX PA (ZYMO) ZYMOGENETICS INC.

XX PI Presnell SR, Xu W, Novak JB, Whitmore TE, Grant FJ.

XX DR WPI. 2002-527700/56.

XX DR P-PSDB; ABB81644.

XX PT Novel zcytor19 polypeptides and polynucleotides useful for stimulating
 PT immune responses in animals for producing antibodies, and for treating
 PT autoimmune diseases, leukemia and asthma -

XX PS

XX PS Claim 2; Page 179-181; 200pp; English.

XX CC The present invention describes an isolated human zcytor19 protein (1),
 CC and truncated zcytor19 proteins. (1) has immunosuppressive, cytostatic,
 CC antirheumatic, antiarthritic, neuroprotective, antiinflammatory,
 CC antitumoric, nephrotropic, dermatological, anti-HIV and haemostatic
 CC activities, and can be used in vaccines. (1) or an antibody binding (1)
 CC can be used for suppressing the immune system for reducing rejection of
 CC tissue or organ transplants and grafts and for treating T-cell specific
 CC leukaemia or lymphomas and autoimmune diseases including rheumatoid
 CC arthritis, multiple sclerosis, diabetes mellitus, inflammatory bowel
 CC disease and Crohn's disease. The antibodies can also be used for treating
 CC immunologic renal diseases, glomerulonephritis, mesangiolipolytic
 CC disease, chronic lymphocytic leukaemia, secondary glomerulonephritis or
 CC vasculitis associated with lupus, polyarteritis, scleroderma, HIV-related
 CC diseases, amyloidosis and haemolytic uraemic syndrome. (1) and the
 CC antibodies can also be used for renal or urological neoplasms and
 CC multiple myelomas, asthma, bronchitis, emphysema and other chronic
 CC airway diseases. Human zcytor19 is located to chromosome 1, more
 CC specifically to chromosome 1p36.11. The present sequence encodes a human
 CC truncated soluble zcytor19 protein from the present invention.

XX Sequence 673 BP; 127 A; 223 C; 182 G; 141 T; 0 other;

XX Query Match 34.6%; Score 510; DB 24; Length 673;
 XX Best Local Similarity 100.0%; Pred. No. 3.3e-123;
 XX Matches 510; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX 7 ATGCGGGGCGCGAGGCTGGGGCCCTGTCTCTGTGCTGTGAGCGCGCTCGAGG 66

DB 1 ATGCGGGGCGCGAGGCTGGGGCCCTGTCTCTGTGCTGTGAGCGCGCTCGAGG 60
 QY AGCCCCGCTGTGCGCCCTCCAGAAATGAGAGCTGTCTCCAGAACTTCAGGTGTAC 126
 DB AGCCCCGCTGTGCGCCCTCCAGAAATGAGAGCTGTCTCCAGAACTTCAGGTGTAC 120
 QY CTGACATGCTCCAGAGGCTGTGCAACCCCGAGATGAGACTTATTTTGTGCTTACAG 186
 DB CTGACATGCTCCAGAGGCTGTGCAACCCCGAGATGAGACTTATTTTGTGCTTACAG 180
 QY AGCTCTCCAGCCCGTGAACGAGTGGCGGAAATGAGAGTGTGCGGAAACAGAGCTG 246
 DB AGCTCTCCAGCCCGTGAACGAGTGGCGGAAATGAGAGTGTGCGGAAACAGAGCTG 240
 QY CTATGTTCTATGATGTGCTGAGAAAGAGACCTGTCAACAAGTTCAAGGAGCGGTG 306
 DB CTATGTTCTATGATGTGCTGAGAAAGAGACCTGTCAACAAGTTCAAGGAGCGGTG 300
 QY CGGACGGTTTCTCCAGCTCAAGTCCCTGGGTGAGTCCGAATACCTGATTTACCTT 360
 DB CGGACGGTTTCTCCAGCTCAAGTCCCTGGGTGAGTCCGAATACCTGATTTACCTT 360
 QY TTGGAAGTGAAGCGGCGCCAGCTGTGTGTCTCACCAGAGCGAGAGATCTGAGT 426
 DB TTGGAAGTGAAGCGGCGCCAGCTGTGTGTCTCACCAGAGCGAGAGATCTGAGT 420
 QY GCCAATGCCAGTACCAAGTCCCTCTGATGCTCCCACTGATCTGAAATGAGTGTG 486
 DB GCCAATGCCAGTACCAAGTCCCTCTGATGCTCCCACTGATCTGAAATGAGTGTG 480
 QY GCATTCTGAAGAGAGGCGCGGAAACAG 516
 DB GCATTCTGAAGAGAGGCGCGGAAACAG 510

RESULT 10
 AAD50488
 ID AAD50488 standard; cDNA; 674 BP.
 XX AAD50488;
 AC AAD50488;
 DT 24-MAR-2003 (first entry)

XX Human zcytor19 truncated soluble receptor cDNA.

XX Human; leukaemia; carcinoma; acquired immune deficiency syndrome; AIDS;
 XX melanoma; Kaposi's sarcoma; multiple myeloma; non-Hodgkin's lymphoma;
 XX hepatitis; infection; myocarditis; blood vessel formation; gene therapy;
 XX growth regulation; developmental process; immunotherapy; zcytor19; gene;
 XX receptor; 88.

OS Homo sapiens.

XX Key Location/Qualifiers

XX CDS 1..636
 FT /*tag= a
 FT /product= "Human zcytor19 truncated soluble receptor"

FT sig_peptide 1..60
 FT /*tag= b
 FT /*tag= c
 FT /product= "mature human zcytor19 truncated soluble
 FT receptor"

XX WO200286087-A2.

XX PD 31-OCT-2002.

XX PP 19-APR-2002; 2002MO-US12887.

XX PR 20-APR-2001; 2001US-285408P.

XX PR 20-APR-2001; 2001US-285424P.

PR 25-APR-2001; 2001US-286482P.
 PR 29-JUN-2001; 2001US-0895834.
 PR 22-OCT-2001; 2001US-341050P.
 PR 22-OCT-2001; 2001US-341105P.
 XX
 PA (ZYMO) ZYMOGENETICS INC.
 XX
 PI Sheppard PO, Fox BA, Klucher KM, Taft DM, Kindvogel WR;
 XX
 DR WPI, 2003-093122/08.
 DR P-PSDB; AAE32768.
 XX
 PT New zcyto20, zcyto21, zcyto22, zcyto24 and zcyto25 polypeptides and
 PT polynucleotides useful for treating leukemia, carcinoma, malignant
 PT melanoma, AIDS-related Kaposi's sarcoma, myeloma, non-Hodgkin's
 PT lymphoma, hepatitis and infections
 XX
 PS Example 30; Page 147-148; 160pp; English.
 XX
 CC The invention relates to zcyto20, zcyto21, zcyto22, zcyto24 and zcyto25
 CC polypeptides and polynucleotides. Sequences of the invention are useful
 CC for treating hairy cell leukemia, renal cell or basal cell carcinoma,
 CC malignant melanoma, AIDS-related Kaposi's sarcoma, multiple myeloma,
 CC non-Hodgkin's lymphoma, hepatitis B, C or D, infections (e.g. bacterial,
 CC fungal or protozoal) or mucocutaneous. The invention is useful for growth
 CC regulation in the liver, blood vessel formation and other developmental
 CC processes. The invention is also useful in immunotherapy and gene
 CC therapy. The present sequence is human zcyto21 truncated soluble
 CC receptor cDNA.
 XX
 SQ Sequence 674 BP; 128 A; 223 C; 182 G; 141 T; 0 other;
 Query Match 34.6%; Score 510; DB 25; Length 674;
 Best Local Similarity 100.0%; Pred. No. 3.3e-123; Indels 0; Gaps 0;
 Matches 510; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 7 ATGGCGGGGCGGAGCGCTGGGGGCGGCGCTCTCTGCTCTGCTCAGCGGCGGCGG 66
 DB 1 ATGGCGGGGCGGAGCGCTGGGGGCGGCGCTCTCTGCTCTGCTCAGCGGCGGCGG 60
 QY AGGCGCGGCTGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 126
 DB AGGCGCGGCTGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 120
 QY 127 CTGACATGGCTCCGAGGCTGGGCAACCCGAGATGTAAGTATTTGGCTATCAG 186
 DB 121 CTGACATGGCTCCGAGGCTGGGCAACCCGAGATGTAAGTATTTGGCTATCAG 180
 QY 187 AGCTCTCCGAGCGGCTGAGCGGTGGCGGAGTGAAGTGGCGGAGCAAGAGAGCTG 246
 DB 181 AGCTCTCCGAGCGGCTGAGCGGTGGCGGAGTGAAGTGGCGGAGCAAGAGAGCTG 240
 QY 247 CATATGTTCTATGATGCTCTGTAAGAAACAGAGCTTATACAACTTAAAGGACGGT 306
 DB 241 CATATGTTCTATGATGCTCTGTAAGAAACAGAGCTTATACAACTTAAAGGACGGT 300
 QY 307 CGGAGCGGTTCTCCGAGCTCCCAAGTCCCTGGGTGAGTCCGAATACCTGATTAACCT 366
 DB 301 CGGAGCGGTTCTCCGAGCTCCCAAGTCCCTGGGTGAGTCCGAATACCTGATTAACCT 360
 QY 367 TTGGAATGAGAGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 426
 DB 361 TTGGAATGAGAGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 420
 QY 427 GCCAATGCCAGTACAGCTGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 486
 DB 421 GCCAATGCCAGTACAGCTGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 480
 QY 487 GCATTTGGAAGAGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 516
 DB 481 GCATTTGGAAGAGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 510

RESULT 11
 AAD35324
 ID AAD35324 standard; DNA; 704 BP.
 XX
 AC AAD35324;
 XX
 DT 25-UTU-2002 (first entry)
 XX
 DE Human (DNAX) interferon like receptor subunit 4) DIRS4 DNA.
 XX
 KM Human; morphogenesis; DNAX interferon like receptor subunit 4; DIRS4;
 KM immune system; cytokine receptor; tumour necrosis factor; TNF; TNF;
 KM toll like receptor like molecule; TLR-L; transforming growth factor;
 KM TNF; 5685C6; claudin; schlafen; gene therapy; vaccine; immunological;
 KM medical disorder; gene; de.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FH CDS 1..636
 FT /"tag" a
 FT /product= "Human DIRS4 protein"
 XX
 PN MO200220569-A2.
 PD 14-MAR-2002.
 XX
 PF 07-SEP-2001; 2001WO-US28013.
 XX
 PR 08-SEP-2000; 2000US-231267P.
 XX
 PA (SCHER) SCHERING CORP.
 PI Parham CL, Gorman DM, Kurata H, Arai N, Sana TR, Matsson JD,
 PI Murphy BE, Savkoor C, Grein U, Smith KM, McClanahan TK;
 DR WPI, 2002-362239/39.
 DR P-PSDB; AAE22212.
 XX
 PT Recombinant polypeptide for immunizing a subject, comprises
 PT non-overlapping segments of amino acids identical to cytokine receptor
 PT sequences
 XX
 PS Claim 16; Page 95-96; 211pp; English.
 XX
 CC The present invention relates to compositions and methods for affecting
 CC mammalian physiology, including morphogenesis or immune system function.
 CC The invention particularly relates to recombinant polypeptides comprising
 CC 3 distinct non-overlapping segments of four amino acids identical to
 CC cytokine receptors, e.g., cytokine receptor like molecular structures
 CC such as segments of the sequences of DNAX interferon like receptor
 CC subunit 4 (DIRS4), tumour necrosis factor (TNF or TNF), toll like
 CC receptor like molecules (TLR-L1 through TLR-L5), transforming growth
 CC factor (TGF), 5685C6, claudin and schlafens. Sequences of the invention
 CC are used to modulate physiology or development of a cell. They are also
 CC used in gene therapy and as vaccines. Nucleic acid sequences are useful
 CC as probes for detecting a level of respective genes or transcripts in
 CC patients suspected of having an immunological or other medical disorders.
 CC The present sequence is human DIRS4 DNA.
 XX
 SQ Sequence 704 BP; 144 A; 229 C; 189 G; 142 T; 0 other;
 Query Match 34.6%; Score 510; DB 24; Length 704;
 Best Local Similarity 100.0%; Pred. No. 3.4e-123; Indels 0; Gaps 0;
 Matches 510; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 7 ATGGCGGGGCGGAGCGCTGGGGGCGGCGGCTCTCTGCTCTGCTCAGCGGCGGCGG 66
 DB 1 ATGGCGGGGCGGAGCGCTGGGGGCGGCGGCTCTCTGCTCTGCTCAGCGGCGGCGG 60
 QY 67 AGGCGCGGCTGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 126
 DB 61 AGGCGCGGCTGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 120

XX	Human zcytor19 degenerate nucleotide sequence SEQ ID NO:29.
KV	Human; zcytor19; cytokine receptor; immunosuppressive; cyostatic;
KV	antihemetic; antiarthritic; neuroprotective; antiinflammatory;
KV	antidiabetic; nephrotropic; dermatologic; anti-HIV; haemostatic;
KV	vaccine; immune system; T-cell specific leukaemia; lymphoma; lupus;
KV	autoimmune disease; rheumatoid arthritis; multiple sclerosis; HIV;
KV	diabetes mellitus; inflammatory bowel disease; Crohn's disease; asthma;
KV	immunologic renal disease; glomerulonephritis; vasculitis; polyarteritis;
KV	mesangiol proliferative disease; chronic lymphocytic leukaemia; bronchitis;
KV	secondary glomerulonephritis; scleroderma; amyloidosis; multiple myeloma;
KV	hemolytic uremic syndrome; renal neoplasm; urological neoplasms;
KV	emphysema; chronic airway disease; chromosome 1; chromosome 1p36.11;
gene; Bb.	
XX	
OS	Homoe saplene:
PN	N0200244209-A2.
PD	
XX	06-JUN-2002.
PP	
XX	28-NOV-2001; 2001WO-US44808.
PR	
XX	28-NOV-2000; 2000US-253561P.
PR	07-FEB-2001; 2001US-267211P.
PA	(ZYMO) ZYMOGENETICS INC.
Pt	
PI	Presnell SR, Xu W, Novak VB, Whitmore TB, Grant FJ;
DR	WPI; 2002-527700/56.
XX	
Pt	Novel zcytor19 polypeptides and polynucleotides useful for stimulating
XX	immune responses in animals for producing antibodies, and for treating
Pt	autoimmune diseases, leukemia and asthma -

[illegible]

QY 511 AACAGACCTTATTTCCAGTCACTCCCATGCGAGCCAGTCAGATCACTCTCCAGCCA 570
 DB 207 AACAGACCTTATTTCCAGTCACTCCCATGCGAGCCAGTCAGATCACTCTCCAGCCA 148
 QY 571 GCTGCCAGGAAACACCACTGCTGCTGAGGCAAAACATCTACAGTTGAGTCCGAAA 630
 DB 147 GCTGCCAGGAAACACCACTGCTGCTGAGGCAAAACATCTACAGTTGAGTCCGAAA 88
 QY 631 TACAGCAAGTTCTTAAGCCCACTGCTTCTTCTGAGAGTCCAGG 677
 DB 87 TACAGCAAGTTCTTAAGCCCACTGCTTCTTCTGAGAGTCCAGG 41

RESULT 15
 ID AAF65522/C
 AC AAF65522 standard; cDNA; 382 BP.
 XX AAF65522;
 DT 09-APR-2001 (first entry)
 XX
 DE Novel human polynucleotide, SEQ ID NO: 1278.
 XX
 KM Human; cytosolic; gene therapy; colon cancer; prostate cancer;
 XX breast cancer; lung cancer; cancer detection; 88.
 OS Homo sapiens.
 XX
 PN WO200102568-A2.
 PD 11-JAN-2001.
 XX
 PF 30-JUN-2000; 2000WO-US18374.
 PR 02-JUL-1999; 99US-0142310.
 PR 02-JUL-1999; 99US-0142311.
 XX
 PA (CHIR) CHIRON CORP.
 PA (HYSB-) HYSBQ INC.
 XX
 PI Williams LT, Escobedo J, Innis MA, Garcia PD, Klinger J, Kassam A,
 PI Reinhard C, Randazzo P, Kennedy GC, Pot D, Lamson G, Drmanac R;
 PI Cirenjakov R, Drmanac S, Dickson M, Labat I, Leshchowitz D,
 PI Kita D, Garcia V, Jones JW, Strache-Clain B;
 DR WPI; 2001-091805/10.
 XX
 PT Library of polynucleotides for diagnosing a cancerous state of a
 PT mammalian cell and detecting cancer, particularly of the colon or
 PT prostate, comprises 3351 human polynucleotide sequences -
 XX
 PS Claim 9; Page 727; 1046pp; English.
 XX
 CC The present sequence is one of 3351 sequences in a library of human
 CC polynucleotides. The library is used to detect differentially expressed
 CC genes correlated with a cancerous state of a mammalian cell and can
 CC detect colon, prostate, breast, and lung cancer. The library can be used
 CC to produce probes for detection of mRNA and to produce additional copies
 CC of the polynucleotides. The probes can be used for chromosome mapping of
 CC the polynucleotides and for detection of transcription levels. Ribozymes
 CC or antisense oligonucleotides can be generated. The polynucleotides and
 CC their gene products are used as genetic or biochemical markers (e.g. in
 CC blood or tissues) that will detect the earliest changes along the
 CC carcinogenesis pathway and/or monitor the efficacy of therapies and
 CC preventive interventions. The polynucleotides, polypeptides and
 CC antibodies against them can be used in pharmaceutical compositions to
 CC treat the cancers and proliferative disorders such as neoplasia,
 CC dysplasia and hyperplasia.
 XX
 SQ Sequence 382 BP; 77 A; 130 G; 98 T; 0 other;

Query Match 11.0%; Score 162.2; DB 22; Length 382;

Best Local Similarity 98.2%; Pred. No. 2,1e-32;
 Matches 164; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 511 AACAGACCTTATTTCCAGTCACTCCCATGCGAGCCAGTCAGATCACTCTCCAGCCA 570
 DB 207 AACAGACCTTATTTCCAGTCACTCCCATGCGAGCCAGTCAGATCACTCTCCAGCCA 148
 QY 571 GCTGCCAGGAAACACCACTGCTGCTGAGGCAAAACATCTACAGTTGAGTCCGAAA 630
 DB 147 GCTGCCAGGAAACACCACTGCTGCTGAGGCAAAACATCTACAGTTGAGTCCGAAA 88
 QY 631 TACAGCAAGTTCTTAAGCCCACTGCTTCTTCTGAGAGTCCAGG 677
 DB 87 TACAGCAAGTTCTTAAGCCCACTGCTTCTTCTGAGAGTCCAGG 41

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